

Claims:

1. A method of assessing the activity level of a database management system, comprising the steps of:
 - counting the number of page fix operations performed by at least one execution
 - 5 unit of the database management system; and
 - computing an activity measure for the database management system;
 - wherein the activity measure is a function of the number of page fix operations counted at the counting step.
2. The method of claim 1, wherein the activity measure is used as the sole indicator
- 10 of activity level for the database management system.
3. The method of claim 1, wherein the counting step comprises incrementing one of a plurality of counters in response to each of a plurality of increment requests, wherein an increment request is made at an instance where a page fix operation is performed by one of the execution units.
- 15 4. The method of claim 3, wherein a local counter associated with one or more execution units of the at least one execution unit are incremented in the incrementing step, wherein the method further comprises the step of updating a shared counter associated with the one or more execution units when the respective local counter attains a predetermined value, and wherein the activity measure is based on the value of one or
- 20 more shared counters associated with the at least one execution unit.
5. The method of claim 3, wherein the increment requests are distributed substantially evenly over the plurality of counters.
6. The method of claim 3, further comprising the step of associating a counter with at least one execution unit, such that when each of the at least one execution unit
- 25 performs a page fix operation, the counter associated with the respective execution unit is incremented at the counting step.

7. The method of claim 6, further comprising the step of selecting one or more execution units from the at least one execution unit, such that the activity measure is based on the value of one or more counters associated with the selected execution units.
8. The method of claim 6, wherein counters are associated with execution units in the associating step in a circular, round robin fashion.
9. An activity level assessment system for assessing the activity of a database management system, the activity level assessment system comprising:
at least one control module programmed with instructions which are executable by the database management system, the at least one control module being programmed to count the number of page fix operations performed by at least one execution unit of the database management system and compute an activity measure for the database management system;
wherein the activity measure is a function of the number of page fix operations counted.
10. The system of claim 9, wherein the activity measure is used as the sole indicator of activity level for the database management system.
11. The system of claim 9, further comprising a system module programmed to establish a plurality of counters for association with the at least one execution unit in a memory of the database management system.
12. The system of claim 11, wherein the plurality of counters comprise at least one local counter and at least one shared counter, and wherein the activity measure is based on the value of one or more the shared counters.
13. The system of claim 11, wherein the number of established counters has been determined to be optimal for the number of processors within the database management system.

14. The system of claim 11, wherein the memory comprises a plurality of cache lines, each of which contains exactly one counter.
15. The system of claim 11, wherein the system module is further programmed to establish at least one index for storing a memory address associated with one of the plurality of counters, for use in associating counters to execution units.
16. The system of claim 11, wherein the activity measure is based on the value of one or more counters associated with one or more execution units selected from the at least one execution unit.
17. A computer program product comprising a computer-readable medium tangibly embodying computer executable code for directing a data processing system to perform a method of assessing the activity level of a database management system, the computer program product further comprising:
- code for counting the number of page fix operations performed by at least one execution unit of the database management system; and
 - code for computing an activity measure for the database management system; wherein the activity measure is a function of the number of page fix operations counted at the counting step.
18. The computer program product of claim 17, wherein the activity measure is used as the sole indicator of activity level for the database management system.
19. The computer program product of claim 17, wherein the counting step comprises incrementing one of a plurality of counters in response to each of a plurality of increment requests, wherein an increment request is made at an instance where a page fix operation is performed by one of the execution units.
20. The computer program product of claim 19, wherein a local counter associated with one or more execution units of the at least one execution unit are incremented in the incrementing step, wherein the method further comprises the step of updating a shared counter associated with the one or more execution units when the respective local counter

attains a predetermined value, and wherein the activity measure is based on the value of one or more shared counters associated with the at least one execution unit.

21. The computer program product of claim 19, wherein the increment requests are distributed substantially evenly over the plurality of counters.

5 22. The computer program product of claim 19, further comprising the step of associating a counter with at least one execution unit, such that when each of the at least one execution unit performs a page fix operation, the counter associated with the respective execution unit is incremented at the counting step.

10 23. The computer program product of claim 22, further comprising the step of selecting one or more execution units from the at least one execution unit, such that the activity measure is based on the value of one or more counters associated with the selected execution units.

24. The computer program product of claim 22, wherein counters are associated with execution units in the associating step in a circular, round robin fashion.